REMARKS

Favorable reconsideration and allowance of the claims of the present application is respectfully requested.

In the present Official Action of December 4, 2002, the Examiner rejected Claims 1-10 under 35 U.S.C. §102(b) as allegedly being anticipated over U.S. Patent No. 5,923,365 to Tamir ("Tamir"). Applicants' respectfully traverse the aforementioned §102(b) rejection in view of the remarks to follow hereinbelow.

As a preliminary matter, applicants submit a new Abstract of the disclosure to condense the Abstract as originally filed from two paragraphs to one paragraph.

The present invention as claimed in independent Claims 1 and 10 is directed to a system and method for enabling access to video contents by using the trajectory of an object, the trajectory of an object being displayed separately from a video image, whereby the separately displayed trajectory is used to efficiently specify and display a video image scene desired by a user. Such a video contents access method comprises the steps of: extracting objects from video contents; displaying movements of the objects as trajectories on a specific projection screen separate from the video contents; specifying locations on the trajectories; and accessing a desired scene of the video contents [emphasis added]. The underlined limitations are key distinguishing features that are not taught nor suggested in Tamir as will now be explained:

While Tamir provides for the highlighting of an object's movement, i.e., "trajectory", Tamir does not teach or suggest the display of the object's trajectory separate from a video image display providing the original video contents from which object

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movement is extracted. This feature, which has been added to Claims 1 and 10 as amended herein, finds full support in the specification and is clearly shown in Figures 2, 4 and 5. It is respectfully submitted that the separation of the object trajectory images from the original video image is advantageous in that it enables greater control for accessing the video contents because the user is able to independently control the speed of which object trajectories are displayed (see Claim 3) and, a time interval appropriate for the replay speed - especially when utilized in conjunction with the scale (play advantage) feature (Claim 4) that enables time frame manipulation and is used as a reference or guide to enable user adjustment of the replay speed.

Tamir respectfully does not teach such features. That is, as shown in Figure 2 of Tamir and described at Col. 8, lines 8-10, 45-47 and Col. 11, lines 30-32, a past "trajectory" of an object (previously highlighted and tracked by sophisticated electronic processing including real-time motion estimation at video rates and edge tracking – see Tamir at Col. 8, lines 25-30 and Col. 9, lines 50-60) may be superimposed on a video frame as shown in Figure 2. Tamir further teaches away from this concept by the need in Tamir to detect fusion, splitting and occlusion, when objects block each other. Furthermore, the "highlighting" referred to in Tamir is not performed on a trajectory as in the present invention. Rather, in Tamir, a video frame is first grabbed and then a user highlights one or more objects to be tracked (See Tamir, Col. 8, lines 54-60). Thus, Tamir operates contrary to the present invention wherein means is provided for enabling a user to <u>specify a location along the (separately displayed) trajectory</u> corresponding to the desired video frame to be accessed, in order to locate the video frame contents corresponding thereto. Respectfully, the passage in Tamir cited by the Examiner as providing

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this teaching (Col. 2, lines 11-15) rather appears to be directed to computing actual locati ns of tracked objects at individual time periods, which is advantageous for the superposition of a highlighted object on a video frame which Tamir teaches, and particularly, the calculation of an object's centroid in previous frames which are converted into current frame coordinates as explained in Tamir (See Col. 11, lines 10-15).

Respectfully, as Tamir does not teach or suggest any of the limitations of independent Claims 1 and 10 as amended, Tamir can not be anticipatory, and the Examiner is respectfully requested to withdraw the rejections of Claims 1 and 10 as amended herein, and further the rejections of all Claims dependent thereon.

In view of the foregoing, this application is now believed to be in condition for allowance, and a Notice of Allowance is respectfully requested. If the Examiner believes a telephone conference might expedite prosecution of this case, it is respectfully requested that he call applicant's attorney at (516) 742-4343. In addition to the foregoing, pursuant to the requirements, applicants also enclose a **"Version with Markings Showing Changes Made"** to facilitate the Examiner's review of the present amendment.

Respectfully submitted,

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Serial No.: 09/620,113   Docket: JP919990053US1 (13630)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE ABSTRACT:

Please replace the Abstract of the Disclosure as originally filed and replace it

with the following new Abstract:

– A [The present invention provides a method and an apparatus, for accessing video contents

by using the trajectory of an object, whereby the trajectory of an object that is displayed

separately from a video image is used to efficiently specify and display a video image scene

desired by a user.

More particularly, the present invention relates to a] method and an apparatus for using the

trajectory of an object to access video contents, for example, to specify and display a specific

video image scene. Such a video contents access method comprises the steps of: extracting

objects from video contents; displaying movements of the objects as trajectories on a specific

projection screen; specifying locations on the trajectories; and accessing a desired scene of the

video contents. An apparatus is so designed that it performs the above method.--

IN THE CLAIMS:

Please amend Claim 1 and 10 as follows:

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1. (Amended) A video contents access method that uses trajectories of objects, comprising the steps of: extracting objects from video contents; displaying the movements of said objects as trajectories on a specific projection screen separate from a video image display providing said video contents; specifying locations along said trajectories; and accessing a desired scene contained in said video contents.

10. (Amended) A video contents access apparatus comprising: display means for displaying, as trajectories on a specific projection screen, the movements of objects extracted from video contents; said trajectories being displayed on said projection screen separate from a video image display providing said video contents; and instruction means for specifying locations along said trajectories, wherein locations along said trajectories are specified by said instruction means to access a desired scene in said video contents.